

THOMAS EDISON: A LIFE OF INVENTION

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Thomas Edison (1847 – 1931) was arguably the world’s greatest inventor. By the time of his death, he had amassed nearly 1,100 patents, and was aggressive in suing for infringement - sometimes using his reputation and great financial resources to abuse threats of infringement. Figure 1 is a postcard of a portrait of him kept in Fort Myers, Florida, his winter home for many years. Edison was born in Milan, Ohio, a grain-shipping port. In 1947, the USA issued a 3 cent stamp with plate number 23559 for the centenary of his birth (Fig 2). The FDC is postmarked Milan, Ohio.

In 1862 he saved a small boy from being struck by a runaway train. The boy’s father was so grateful that he trained Edison as a telegraph operator. In 1866, Edison moved to Kentucky, where he was employed by Western Union. He worked night shifts, which gave him time to read and do experiments. His time in Kentucky appears again later in this article.

His first patent, granted in 1869, was for an electric vote recorder. Edison moved to New York City shortly thereafter. Edison then developed a telegraphic system, which could send two messages simultaneously in 1874.

Edison’s major innovation was the establishment of an industrial research lab in 1876. It was built in Menlo Park in New Jersey with funds from the sale of an invention, his quadruplex telegraph, to Western Union. This was his first big financial success, and Menlo Park became the first place in the world created with the purpose of producing technological innovations. Edison obtained many patents from research there, although usually it was his employees who carried out the research and development – but always under his direction. The Menlo Park model has been adopted by numerous companies since.

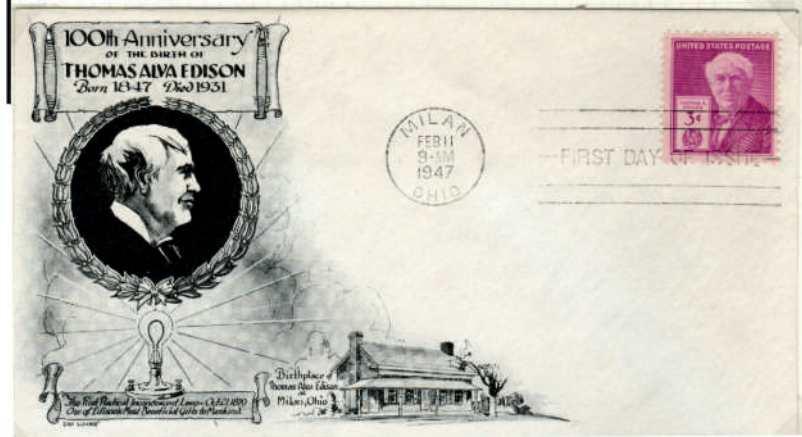
Let’s look at some of Edison’s key inventions. The first of these is the phonograph (Figs 3-5). This was the first device to record and reproduce sounds. Edison was one of several people who developed such devices. Although his machine worked well, he got the target audience wrong, failing to see its potential in music and entertainment, rather seeing it as a way of recording messages, dictating to secretaries or to be used for reading books aloud – all much smaller markets. Figure 6 is a 1903 Ceylon postcard uprated with a 2c and a 3c adhesive with a 5 February Orange, New Jersey receiver mark addressed to Edison at his home there. The card describes the forthcoming Ceylon tour of the Chicago Polyphone, a new attachment to the Edison phonograph. Edison’s competitor, Victor Talking Machines, offered a much greater range of music and songs than Edison. Edison gave up his phonograph business in 1929, but for a while retailers such as Eclipse Musical (Fig 7) sold both Edison and Victor machines. Incidentally, “His Masters Voice” was originally the name of a British record label created in 1901 and based on the title of an 1898 painting which depicted a Jack Russell listening to a cylinder phonograph, and was the trade mark of the HMV Company in the UK. The painting was also used as a trade mark and logo by Victor Talking Machine Company in the USA.



Fig 1: Portrait of Edison



Fig 2: USA 1947 with plate number, plus FDC



Figs 3 - 5: The phonograph



Fig 6: 1903 uprated Ceylon postcard addressed to Edison



Fig 7: Eclipse Musical Co.



Fig 8: USA 1929

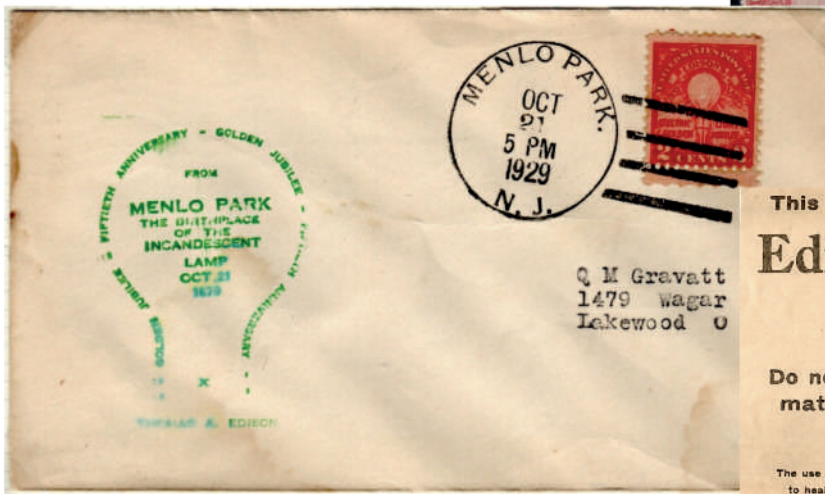


Fig 9: Menlo Park FDC with light bulb cachet

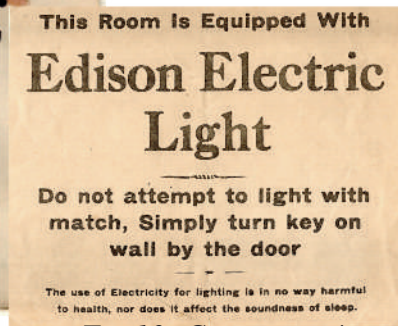


Fig 10: Correct use!



Figs 11 - 12: Electric light bulb

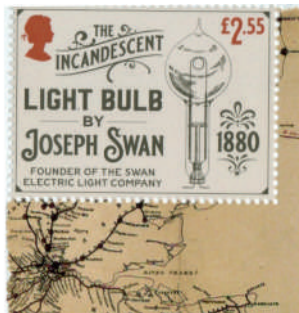


Fig 13: Edison and Swan

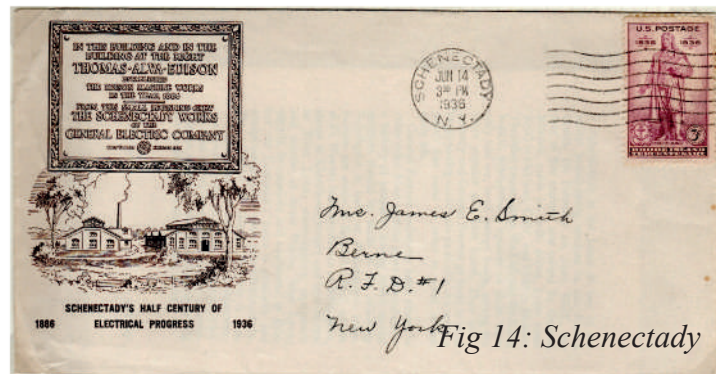


Fig 14: Schenectady



Fig 15: Electric car pioneer



Fig 16: Young Tom Edison

Fig 17: Links to Kentucky

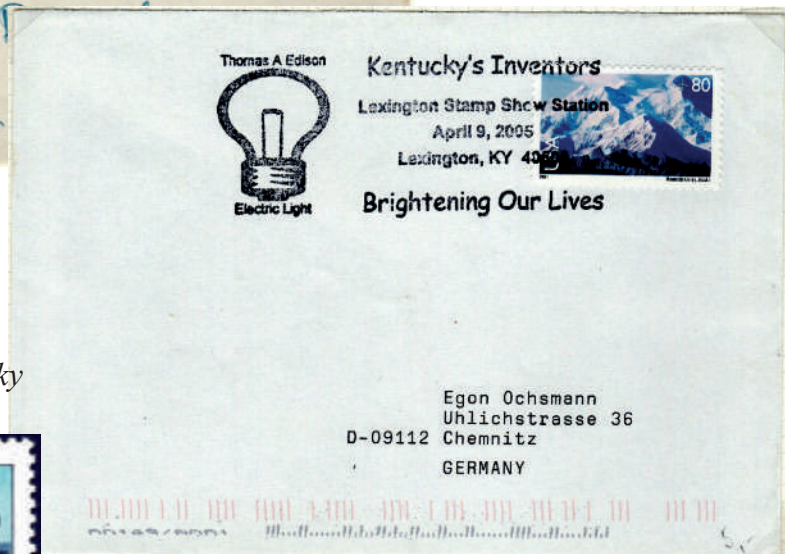


Fig 18: Edson Arantes do Nascimento, better known as Pele

Let us now look at his second great invention – the electric light bulb. In 1878, Edison began working on electrical illumination, something he hoped could compete with gas and oil-based lighting. He began by tackling the problem of creating a long-lasting incandescent lamp, something that would be needed for indoor use. In 1840, Warren de la Rue (yes, a son of the founder of the De La Rue company that philatelists know and love) developed an efficient light bulb using a coiled platinum filament but the high cost of platinum kept the bulb from becoming successful. Another early inventor of such lights was Joseph Swan – his name will reappear shortly!

These early bulbs had a short life and required a consistent electric current to operate which made them difficult to apply on a large scale commercially. In November 1879, Edison filed for a U.S. patent for a strip of carbon filament coiled and connected to contact wires. The carbon was best created from bamboo and would last over 1,200 hours. Crucially, he tied this to the development of a system of electricity generation and distribution. Incidentally, the streets around Menlo Park were the first in the world to have electric street lighting. Figure 8 shows US stamps issued in 1929 to celebrate the 50th anniversary of Edison’s successful light bulb, whilst Figure 9 has a FDC of the stamp postmarked Menlo Park and with a green cachet shaped as an electric light bulb. Figure 10 offers guidance for new users on how to use electric light bulbs, with a warning not to use matches to try to switch them on!

In 1878, Edison formed the Edison Electric Light Company with several financiers, including J P Morgan and members of the Vanderbilt family. He famously said: “We will make electricity so cheap that only the rich will burn candles”.

Figures 11 and 14 show the invention by Joseph Swan of a patented competitor to Edison’s light bulb, taken from the 2021 Royal Mail “Industrial Revolutions” prestige book of stamps. Figure 12 is a Jersey stamp celebrating Edison’s light bulb, Figure 13, from the 2021 Royal Mail prestige book shows how Edison and Swan avoided expensive patent litigation by working together to create a jointly owned company which promoted its products under the horribly named Ediswan trade mark. Figure 14 notes that Menlo Park wasn’t the only research centre Edison set up – he also created one at Schenectady, New York in 1886.

Let me finish off with a few things you probably never knew about Edison. As Figure 15 shows, he was a pioneer in the development of electric cars; he built some, patented some developments for them and was still researching them at his death. The man was genuinely way ahead of his time in this regard. Also, did you know films have been made about his life? Figure 16 shows a French 1944 postmark promoting the 1940 highly fictionalised Micky Rooney film “Young Tom Edison”. As Figure 17 shows, Kentucky is keen to promote its link to Edison despite the fact that he only lived in that state for one year as a teenager and never developed any inventions whilst he lived there. Finally, Figure 18 shows that Pele – yes THE Pele - was named Edson by his parents because they admired Edison so much.

Edison had interesting political and social views. He supported votes for women at a time when this was not popular in the USA, refused to design or develop military weapons, was a vegetarian because he was opposed to the killing of animals, and advocated monetary reform in the USA. All in all, a fascinating individual! 